



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

September 23, 2021

Mr. John Dinelli, Site Vice President
Entergy Operations, Inc.
N-TSB-58
1448 S.R. 333
Russellville, AR 72802-0967

**SUBJECT: ARKANSAS NUCLEAR ONE – DESIGN BASIS ASSURANCE INSPECTION
(TEAMS) INSPECTION REPORT 05000313/2021011 AND 05000368/2021011**

Dear Mr. Dinelli:

On August 4, 2021, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Arkansas Nuclear One. On September 13, 2021, the NRC inspectors discussed the results of this inspection with you and other members of your staff. The results of this inspection are documented in the enclosed report.

No NRC-identified or self-revealing findings were identified during this inspection.

A licensee-identified violation which was determined to be of very low safety significance is documented in this report. We are treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest the violation or the significance or severity of the violation documented in this inspection report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region IV; the Director, Office of Enforcement; and the NRC Resident Inspector at Arkansas Nuclear One.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

A handwritten signature in black ink that reads "Vincent Gaddy". The signature is written in a cursive style.

Signed by Gaddy, Vincent
on 09/23/21

Vincent G. Gaddy, Chief
Engineering Branch 1
Division of Reactor Safety

Docket Nos. 05000313 and 05000368
License Nos. DPR-51 and NPF-6

Enclosure:
As stated

cc w/ encl: Distribution via LISTSERV®

ARKANSAS NUCLEAR ONE – DESIGN BASIS ASSURANCE INSPECTION (TEAMS)
 INSPECTION REPORT 05000313/2021011 AND 05000368/2021011 – DATED
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SUNSI Review ADAMS: Non-Publicly Available Non-Sensitive Keyword:
 By: wcs Yes No Publicly Available Sensitive NRC-002

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**U.S. NUCLEAR REGULATORY COMMISSION
Inspection Report**

Docket Numbers: 05000313 and 05000368

License Numbers: DPR-51 and NPF-6

Report Numbers: 05000313/2021011 and 05000368/2021011

Enterprise Identifier: I-2021-011-0003

Licensee: Entergy Operations, Inc.

Facility: Arkansas Nuclear One

Location: Russellville, AR

Inspection Dates: June 14, 2021 to July 2, 2021

Inspectors: R. Deese, Senior Reactor Analyst
J. Drake, Senior Reactor Inspector
N. Okonkwo, Reactor Inspector
D. Reinert, Reactor Inspector
W. Sifre, Senior Reactor Inspector
T. Steadham, Senior Resident Inspector

Approved By: Vincent G. Gaddy
Engineering Branch 1
Division of Reactor Safety

Enclosure

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a design basis assurance inspection (teams) inspection at Arkansas Nuclear One, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information. A licensee-identified non-cited violation is documented in report section: 71111.21M.

List of Findings and Violations

No findings or violations of more than minor significance were identified.

Additional Tracking Items

None.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

Starting on March 20, 2020, in response to the National Emergency declared by the President of the United States on the public health risks of the coronavirus (COVID-19), inspectors were directed to begin telework. In addition, regional baseline inspections were evaluated to determine if all or a portion of the objectives and requirements stated in the IP could be performed remotely. If the inspections could be performed remotely, they were conducted per the applicable IP. In some cases, portions of an IP were completed remotely and on site. The inspections documented below met the objectives and requirements for completion of the IP.

REACTOR SAFETY

71111.21M - Design Bases Assurance Inspection (Teams)

The inspectors evaluated the following components and listed applicable attributes, permanent modifications, and operating experience:

Design Review - Risk-Significant/Low Design Margin Components (IP Section 02.02) (9 Samples)

- (1) Service Water Motor Operated Valve MOV CV-3823 (Unit 1)
 - Valve testing procedures and performance history were reviewed to assure consistency with vendor and industry standards
 - Monitoring programs, health reports, and corrective action program reports to verify the monitoring of potential degradation
 - Design basis calculations including system hydraulic analysis
 - Valve and actuator design drawings and vendor specifications
 - System operating procedures used in emergency conditions

- (2) Service Water Motor Operated Valve MOV 2CV-1541 (Unit 2)
 - Valve testing procedures and performance history were reviewed to assure consistency with vendor and industry standards
 - Monitoring programs, health reports, and corrective action program reports to verify the monitoring of potential degradation
 - Design basis calculations including system hydraulic analysis
 - Valve and actuator design drawings and vendor specifications
 - System operating procedures used in emergency conditions

- (3) Common Feedwater Pumps and Valves
 - Pump and valve testing procedures and performance history were reviewed to assure consistency with vendor and industry standards
 - System monitoring programs, health reports, and corrective action program reports to verify the monitoring of potential degradation
 - Design basis calculations including system hydraulic analysis, pump performance curves, maximum expected differential pressures, and available condensate water inventory calculations
 - Pump, valve and actuator design drawings and vendor specifications
 - System operating procedures used in emergency conditions

- (4) Essential Feedwater Pump 2P7A (Unit 2)
 - Pump testing procedures and performance history were reviewed to assure consistency with vendor and industry standards
 - Monitoring programs, health reports, and corrective action program reports to verify the monitoring of potential degradation
 - Design basis calculations including system hydraulic analysis, pump performance curves, maximum expected differential pressures, and available inventory calculations
 - Pump design drawings and vendor specifications
 - System operating procedures used in emergency conditions

- (5) Borated Water Storage Tank Outlet Isolation Valve MOV CV-1408
 - Valve testing procedures and performance history were reviewed to assure consistency with vendor and industry standards
 - Monitoring programs, health reports, and corrective action program reports to verify the monitoring of potential degradation
 - Design basis calculations including system hydraulic analysis.
 - Valve and actuator design drawings and vendor specifications
 - System operating procedures used in emergency conditions

- (6) Main Steam Isolation Valve 2CV-1060 (Unit 2)
 - Component maintenance history, system health reports, and corrective action program reports to verify the monitoring of potential degradation
 - Preventive maintenance bases to ensure activities conform to vendor requirements
 - Inservice testing and system-level design bases documents
 - Procedures for full stroke inservice testing
 - Completed surveillance tests to ensure acceptance criteria have been met
 - Calculations for air accumulator pressure drop operability criteria

- (7) 480 Volt Motor Control Center 2B61 (Unit 2)
 - System health reports, component maintenance history, and corrective action program reports to verify the monitoring and correction of potential degradation.
 - Calculations for electrical distribution, system load flow/voltage drop, short-circuit, and electrical protection to verify that electrical equipment capacity and voltages remained within minimum acceptable limits.

- The protective device settings and circuit breaker ratings to ensure adequate selective protection coordination of connected equipment during worst case short-circuit conditions.
 - Procedures for preventive maintenance, inspection, and testing to compare maintenance practices against industry and vendor guidance.
 - Results of completed preventative maintenance on load centers, motor control centers, and breakers
- (8) 4KV Buss 2A1 (Unit 2)
- System health reports, component maintenance history, and corrective action program reports to verify the monitoring and correction of potential degradation.
 - Calculations for electrical distribution, system load flow/voltage drop, short-circuit, and electrical protection to verify that bus capacity and voltages remained within the minimum acceptable limits.
 - The protective device settings and feeder circuit breaker ratings to ensure adequate selective protection coordination of connected equipment during worst-case short circuit conditions.
 - Procedures for preventive maintenance, inspection, and testing to compare maintenance practices against industry and vendor guidance, including the cable aging management program.
 - Results of completed preventative maintenance on switchgear and breakers, including breaker tracking.
- (9) Operator Actions - The inspectors observed the following simulator scenarios which demonstrated the ability to perform critical actions in a timely manner consistent with the design of the units:
- Unit 1 control room operator actions to start and align the common feedwater system resulting from a loss of the main feedwater pumps, the auxiliary feedwater pump, and the emergency feedwater pumps within 27.5 minutes.
 - Unit 1 control room operator actions to close the service water piping header crossover valves on a flow diversion condition caused by a loss of one loop of service water within 30 minutes.
 - Unit 2 control room operator actions to establish flow to the steam generators with the common feedwater system resulting from a loss of the main feedwater pumps, the auxiliary feedwater pump, and the emergency feedwater pumps within 29 minutes.
 - Unit 2 control room operator actions to trip reactor coolant pumps following a loss of component cooling water within 20 minutes.

Design Review - Large Early Release Frequency (LERFs) (IP Section 02.02) (1 Sample)

- (1) Borated Water Storage Tank
- System health reports, component maintenance history, and corrective action program reports to verify the monitoring and correction of potential degradation.
 - Design basis calculations including system hydraulic analysis.
 - System chemistry control and monitoring, as well as chemical excursion effects and corrective actions.
 - Component modifications and associated evaluations.

Modification Review - Permanent Mods (IP Section 02.03) (5 Samples)

- (1) Engineering Change 58842, NFPA 805 Common Feedwater Tie-In to Unit 2 Emergency Feedwater System
- (2) Engineering Change 83739, Revise Calculation and Drawing for Pipe Support 2CCA-16-H21 to Resolve CR-ANO-2-2019-01487
- (3) Engineering Change 61853, Design Specification Evaluation for Replacement of Shutdown Cooling Heat Exchangers 2E-35A and 2E-35B
- (4) Engineering Change 60179 Shutdown Cooling Heat Exchanger ASME Code Repairs
- (5) Engineering Change 00364 Unit 2 Emergency Diesel Generator Governor Upgrade

Review of Operating Experience Issues (IP Section 02.06) (1 Sample)

- (1) OE-NOE-2018-00204: CR-WF3-2017-09953 - NCV GREEN Waterford failure to follow procedural guidance when performing periodic maintenance on the main transformer isophase buses. CR-WF3-2017-05844

INSPECTION RESULTS

Licensee-Identified Non-Cited Violation	71111.21M
This violation of very low safety significance was identified by the licensee and has been entered into the licensee corrective action program and is being treated as a non-cited violation, consistent with Section 2.3.2 of the Enforcement Policy.	
Violation: During performance of IP 71111.21M, "Design Bases Assurance Inspection," the inspectors determined that the licensee had identified in 2019 that they were not performing inspections/testing adequate to ensure the service water piping would perform satisfactorily in service. Through document review, the inspectors determined that the service water piping between the emergency cooling pond (ECP) and the units was safety-related, seismic Class 1 piping that provided the ability to transfer decay heat from the reactor core to the ultimate heat sink. It was noted by the inspectors that the requirements of Title 10 of the <i>Code of Federal Regulations</i> (10 CFR) Part 50, Appendix B, were applicable to the service water piping because the requirements apply to all activities affecting the safety-related functions of structures, systems, and components. The inspectors also identified that the NRC has issued a number of guidance documents describing service water systems and acceptable testing programs, including NUREG-75/087, "Standard Review Plan," and NRC Generic Letter 89-13 "Service Water System Problems Affecting Safety-Related Equipment", July 18, 1989.	
The licensee noted that both unit's buried ECP supply pipes have not been monitored for degradation either by the Buried Pipe Program or by the Microbiologically Influenced Corrosion (MIC) Program. The Buried Pipe Program identifies them for opportunistic inspections; however, no opportunities have occurred and the section of pipe between the emergency cooling pond and the units was not included in regular testing and evaluations performed under the MIC Program. The inspectors noted that the last thickness testing that the licensee was able to provide was for the return line for Unit 1 performed in April 2010. The report identified 68 locations that were 40 percent to 50 percent thru wall. Title 10 CFR Part 50, Appendix B, Criterion XI, "Test Control," requires, in part, that a test program shall be established to assure that all testing required to demonstrate that systems, structures, and components will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents. Contrary to the above, from May 31, 2008, to the	

present, the licensee failed to establish and implement an adequate test program to assure that all testing required to demonstrate that the service water piping between the emergency cooling pond and the units will perform satisfactorily in service was identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents. Specifically, the licensee did not establish testing requirements and acceptance limits to detect degradation of the service water piping, which could result in the piping being rendered inoperable and unable to meet its safety-related function due to undetected cracks or other types of degradation.

Significance/Severity: Green. The inspectors determined that the failure to perform adequate testing of the service water piping between the emergency cooling pond and the units is a performance deficiency. In accordance with Inspection Manual Chapter 0612, Appendix B, "Issue Screening," the issue is more than minor because it is associated with the protection against external factors attribute of the Mitigating Systems Cornerstone, and affected the cornerstone objective to ensure availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, the licensee failed to perform examinations required to demonstrate that the piping can perform its intended function during design basis seismic events, and therefore maintain the ability to provide cooling for the reactor. The inspectors evaluated the finding using NRC Inspection Manual Chapter 0609, Appendix A, Exhibit 2, Mitigating Systems. The inspectors determined the finding is of very low safety significance (Green) because the finding did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic initiating event.

Corrective Action References: CR-ANO-C-2019-010150, CR-ANO-C-2019-1633, CR-HQN-2019-0645, CR-ANO-1-2429, CR-ANO-2-1204

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On September 13, 2021, the inspectors presented the Design Basis Assurance Inspection results to John Dinelli, Site Vice President, and other members of the licensee staff.

DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.21M	Calculations	84-E-0103-01	General Criteria for Safety Buses	11
		84-E-0103-61	Breaker 152/102 plant protective study	0
		84-E-0103-62	Breaker 152/103 plant protective study	0
		84-E-0103-70	Breaker 152/112 plant protective Study	0
		84-E-0103-71	Breaker 152/113 plant protective study	0
		88-E-0200-06	P-T Calculation for Unit 2 Emergency Feedwater System	4
		CALC-09-E-0002-01	ANO-1 Start-Up 2 Fast and Manual Transfer Capability	5
		CALC-09-E-0016-01	ANO-1 Start-up #1 & Unit Aux Millstone Studies	2
		CALC-2CCA-16-H21	Qualification of Support 2CCA-16-H21	10/25/1993
		CALC-82-D-2086-01	Volume of CST T41B Requiring tornado missile protection	4
		CALC-85-E-0055	ASME Class 1 & 2 Analysis for Pressurizer Piping 2CCA-13 thru 2CCA-16, 2CCA-38, and 2CCA-47	4
		CALC-88-E-0035-77	Seismic Analysis of the EFW Pumps 2P7A and B	0
		CALC-90-E-0013-40	Qualification of the EFW Pump 2P7A FOR Operation During and After DBE	0
		CALC-91-E-0091-01	Design Control Logic Review of ANO-1 MOV	4
		CALC-92-E-0009-01	AC-Motor Operated Valve Terminal Voltage	12
		CALC-92-E-0077-09	CFW Unit 1 and 2 Hydraulic Calculation	0
		CALC-92-E-0078-04	Unit 2 EFW System Pump Performance Requirements	4
CALC-93-SQ-0002-163	Seismic Qualification Package for EFW Pumps P7A & 2P7A	0		
CALC-94-E-0018-02	GL-89-10 MOV Power Cable Breaker and Thermal Overload Device Evaluation	4		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		CALC-95-E-0079-07	ANO-2 Feedwater Line Break for RSG and Power Uprate	0
		CALC-95-E-0082-04	ANO-2 Loss of Feedwater Analysis for RSG and Power Uprate	0
		CALC-991883N201-01	EFW Turbine Exhaust Stack Capacity Following Tornado	1
		CALC-P-28	High Energy Line Break Analysis Outside Containment	0
		CALC-V-1011	Pressure Analysis for CV-1408	3
		CALC-V-CV-1408-05	Seismic Qualification of Valve Assembly CV1408	6
		CALC-V-CV-1408-10	MOV Torque Switch Setpoints for CV-1408	10
	Corrective Action Documents		CR-ANO-2-2018-04514, CR-ANO-2-2019-01778, CR-ANO-2-2019-02100, CR-ANO-2-2020-01595, CR-ANO-2-2020-01979, CR-ANO-2-2015-03642, CR-ANO-C-2018-00298, CR-ANO-2-2019-00874, CR-ANO-2-2020-03035, CR-ANO-2-2015-04404 CR-ANO-2-2015-04239, CR-ANO-2-2019-02103, CR-ANO-C-2018-00718, CR-ANO-C-2018-00298, CR-ANO-2-2015-04244, CR-ANO-C-2018-02728, CR-ANO-2-2011-01559, CR-ANO-2-2008-02601, CR-ANO-2-2015-02361, CR-ANO-1-2015-02193, CR-ANO-C-2019-01633, CR-ANO-C-2019-010150, CR-ANO-C-01633, CR-ANO-HQN-00645	
			CR-C-2021-01565, CR-C-2021-01623, CR-C-20201-01635, CR-ANO-2-2015-02849, CR-ANO-2-02879, CR-ANO-2-02909, CR-ANO-2-03430, CR-ANO-1-1999-00158, CR-ANO-1-2004-01230, CR-ANO-1-2008-02183, CR-ANO-1-2016-03851, CR-ANO-1-2018-01775, CR-ANO-1-2019-03062, CR-ANO-1-2021-01090, CR-ANO-1-2017-00661, CR-ANO-1-2017-02789, CR-ANO-1-2018-00124, CR-ANO-1-2018-00129, CR-ANO-1-2018-03003, CR-ANO-1-2018-04564, CR-ANO-1-2020-00261, CR-ANO-1-2020-00900, CR-ANO-1-2020-01791, CR-ANO-C-2017-00280, 4. CR-ANO-1-2017-00602, 5. CR-ANO-1-2017-00848, 7. CR-ANO-	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			1-2005-02741, 2. CR-C-1996-0194, 3. CR-C-1996-0325, 4. CR-C-1997-0315, 5. CR-C-1998-0115, 6. CR-C-1999-0033, CR-ANO-1-1207-00324, CR-ANO-1-2005-000329, CR-ANO-1-2017-00270, CR-ANO-1-2017-00270, CR-ANO-1-2017-01750, CR-ANO-1-2021-01572, CR-ANO-1-2021-02210, CR-ANO-2-2015-00526, CR-ANO-2-2015-00604, CR-ANO-2-2015-4851, CR-ANO-2-2019-01487, CR-ANO-C-2020-00604, CR-ANO-2-2020-02598, CR-ANO-2-2020-1700, CR-ANO-2-2021-00536, CR-ANO-2-2021-00857, CR-ANO-2-2021-00960, CR-ANO-C-2021-00614, CR-ANO-C-2021-01703	
	Corrective Action Documents Resulting from Inspection		CR-ANO-2-2021-01115, CR-ANO-2-2021-01106, CR:2021-02330, CR: 2021-00993, CR: 2021-01653, CR: 2021-01735, CR: 2021-01751	
	Drawings	2CCA-16-1	Small Pipe Isometric Chemical And Volume Control System	22
		2CCA-16-H21	Pipe Support Detail Chemical and Volume Control	3
		CFW-M-115	Flowserve Pump Curve	0
		E-2004, Sh. 1	Single Line Meter & Relay Diagram 4160 Volt System, Main Supply	19
		E-2005, Sh. 1	Single Line Meter & Relay Diagram 4160 Volt System Engineered Safety Features	031
		E-2008, Sh. 1	Single line Meter & Relay Diagram 480 Volt Load Centers Engineered Safety Features & Main Supply	31
		E-2008. Sh. 1	Single Line Meter & Relay Diagram 480 Volt Load Centers Engineered Safety Features & Main Supply	31
		E-2015, Sh. 1	Single Line Diagram 480 Volt Motor Control Centers 2B61	48
		E-2039, Sh. 1	Logic Diagram, 4160 ACB's, lockout and Under voltage	03
		E-2039, Sh. 2	Logic Diagram, 4160 ACB's, lockout and Undervoltage	03
		E-2076, Sh. 1.	Schematic Diagram, Typical Circuit Breaker 6900V AND 4160V Switchgear	16
		E-2081, Sh. 1	Schematic Diagram Typical 480V Load Center Breaker	10
		E-2092, Sh. 1	Schematic Diagram Startup Transformer Number 2 4160V Air circuit Breakers	028

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		E-2306, Sh. 2	Schematic Diagram Condensate Pump 2P-2B	17
		E-2306, Sh. 3	Schematic Diagram Condensate Pump 2P-2C	19
		E-2306, Sh. 3	Schematic Diagram, Condensate Pump 2P-2C	19
		E-2306, Sh. 5	Schematic Diagram Condensate Pumps	12
		E-2366, Sh. 1A	Schematic Diagram Reactor Cavity Cooling Fan 2VSF34B	03
		E-8, Sh. 1	Single Line Meter & Relay Diagram 480 Volt Load Centers Engineered Safety Features & Main Supply	31
		M-2231, Sh. 1	Piping and Instrumentation Diagram Chemical and Volume Control System	148
	Engineering Changes	0000000364	UNIT 2 EDG GOVERNOR UPGRADE (BASE EC)	
		DCP 88-1090	MOV Modifications for Decay Heat Removal Valves CV-1407 and CV-1408	1
		EC-58224	NFPA 805 Common Feedwater Parent EC 2R25	1
		EC-58247	Installation of Common Feedwater System	0
		EC-58842	ANO NFPA 805 Common Feed Water Tie-In to Unit 2 EFW System	0
		EC-702451	EFW Pump Suction Transient Hydraulic Analysis	0
		EC-79976	EFW Terry Turbine Oil Addition, Filtration, and Quality	10/21/2018
		EC-83739	Revise Calculation And Drawing For Pipe Support 2CCA-16-H21 to Resolve CR-ANO-2-2019-01487	0
		EC47254	Design Input ANO-2 Common Feedwater Simulator Timing	06/25/2014
	EC51036	Design Input ANO-1 Common Feedwater Simulator Timing	06/25/2014	
	Engineering Evaluations	134464	Procurement Engineering Evaluation for Chevron GST ISO 32 Turbine Oil	3/2/2015
	Miscellaneous	1407.38	Work Plan: EQ Inspection of Limitorque Actuators Outside Containment	0
		M-2018	EFW Pump Purchase Specification	6
		OE-NOE-2018-00244:	NCV GREEN Waterford did not follow procedural guidance when performing periodic maintenance on the main transformer isophase buses.	0
		PM Template	ANO Load Center Transformer PM Template	1
		PMEE-004	Preventive Maintenance Engineering Evaluation for 6900 and 4160-Volt Circuit Breakers	14

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		PO 6600-2	Emergency Feedwater Pump	4/7/1977
		PO 6600-M-2018-AC	Emergency Feedwater Pumps	2/29/1972
		Q4-2020	ANO Common Feedwater System Health Report	6/2/2021
		SIPD-9329	Replace Limit Switches 2ZS-1060-2 for MSIV 2CV-1060-2	6/24/2021
		SPEC-ANO-C-2443	Technical Specification for the Design of Q/Non-Q Pipe Supports for ANO 1&2	0
		SPEC-ANO-M-2119	Technical Specification for Pipe Hangers, Supports, and Restraints	5
		SPEC-ANO-M-2455	Procurement of Lisega Series 30 Hydraulic Snubbers	3
		SPEC-ANO-M-2514	Technical Specification for the Design of Piping for ANO 1&2	2
		SPEC-ANO-M-2555	Unit 2 Piping Class Sheets	4
		TC# 9045	Dissolved Gas Analysis for Transformer 2X-02	05/24/21
		TD 1005.0120	Installation and Maintenance Instructions Gas Sealed Transformers Unit Substation Transformers	0
		TD 1005.0120	Installation and Maintenance Instructions Gas Sealed Transformers Unit Substation Transformers	0
		TD 1005.0150	General Instructions Motor Control Center Series 5600	1
		TD 1005.0190	Description Molded-Case Circuit Breakers	0
		TD 1005.0200	Product Selection and Application Molded Case Circuit Breakers	7/10/86
		TD H313.002	Instruction Manual Sluice Gates, Glydaseal Gates And Slide Gates	07/15/1986
		TDB455 0010	FIELD SERVICE Instruction Booklet IB 8203 Procedure for Field Testing/Calibration I-T-E-K line Circuit Breaker Overcurrent Trip Devices I-T-E Types OD-3 Through OD-82 (K-225 Through K-2000) OD-300 Through OD-800 (K-3000 AND K-4000) ABB – Asea Brown Broveri	1
		TDL3290090	Vendor Manual: Disassembly/Reassembly Procedure for Lisega Hydraulic Shock Absorbers, Series 30	1
		TDS459X0090	Installation Instructions for Siemens Energy & Automation,	8/8/00

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
			Inc Shunt Trip Under Voltage Trip and Auxiliary Switch Unit Use with I-T-E Breaker & Switch	
		ULD-0-TOP-02-A	Fire Protection NFPA 805 Topical	2
	Procedures	1106.007	Common Feedwater System	9
		1202.004	Overheating	13
		1403.179	Molded Case Circuit Breaker Testing	37
		1412.057	480V Load Center Switchgear Cleaning and Inspection	013
		1416.040	Mange-Blast Circuit Breaker Maintenance	025
		1416.042	K-LINE Circuit Breaker PM	016
		1416.051	Unit 1 & 2 12IAC53A Relay Test Instructions	005
		1416.38	Siemens Vacuum Circuit Breaker Preventive Maintenance	022
		2107-002	ESF Electrical System Operation	043
		2107.001	Electrical System Operations	133
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	Work Orders		52775096, 52735794, 52800470, 52916322, 52861286, 52734749, 52734751, 00317571, 00528623, 51641017, 00551274, 52274894, 52573226, 00429121, 00526798, 00510218, 52816109, 52921163, 530107, 544679, 52852469, 5298474, 52865304, 52828164-01, 00301122, 51511812, 51799085, 52272017, 52509048, 52612474, 52734890, 52914122, 50285555, 50983353, 51031140, 00409632, 00409632, 00428945, 00506259, 00180790, 00466061, 00501925, 00516395, 00518402, 00518404, 00487877, 50011135, 50240089, 50440331, 50454926, 50526641, 52372803, 52490677, 52609431, 52785361, 52800100, 52848928, 52853631, 52856740, 52865039, 52865698, 52888453, 52899930, 52911021, 52917871, 52953209, 00549374	